

## FIELDVUE™ DVC2000 Digital Valve Controller

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475 Field Communicator

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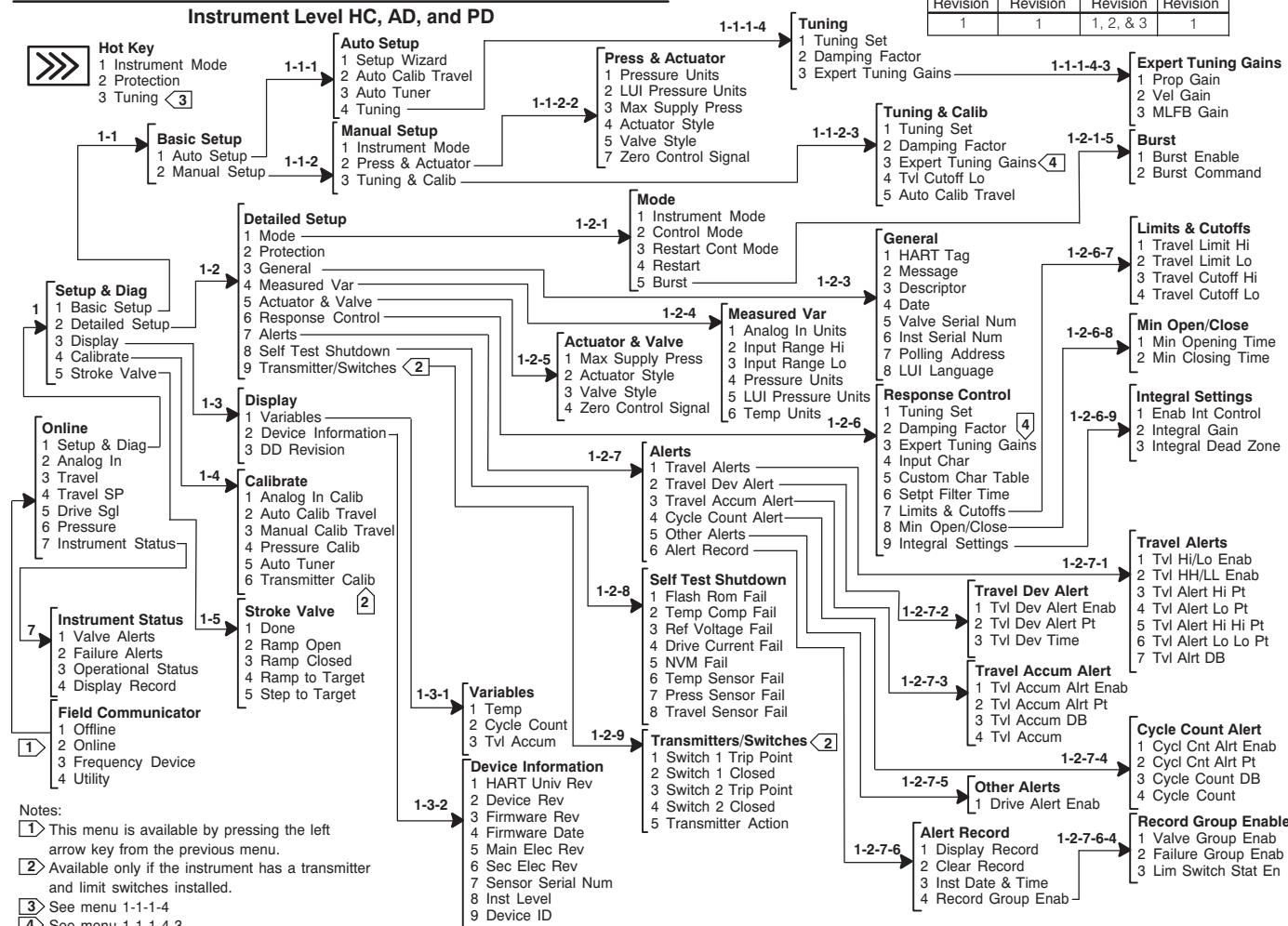
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## Field Communicator Menu Tree – DVC2000 Digital Valve Controller



Function/Variable	Fast-Key Sequence
Actuator Style	1-1-2-2-4 or 1-2-5-2
Alert Record	1-2-7-6
Alert Record Group Enable	1-2-7-6-4
Analog Input	2
Analog Input Calibration	1-4-1
Analog Input Range High	1-2-4-2
Analog Input Range Low	1-2-4-3
Analog Input Units	1-2-4-1
Auto Calibrate Travel	1-4-2 or 1-1-2-3-5
Auto Setup	1-1-1
Auto Tuner	1-1-1-3
Basic Setup	1-1
Burst	1-2-1-5
Calibrate	1-4
Control Mode	1-2-1-2
Custom Characteristic Table	1-2-6-5
Cycle Count and Alert	1-2-7-4
Descriptor	1-2-3-3
Device Description Revision	1-3-3
Device Identification	1-3-2-9
Device Revision	1-3-2-2
Drive Alert Enable	1-2-7-5-1
Drive Signal	5
Failure Alerts	7-2
Firmware Date	1-3-2-4
Firmware Revision	1-3-2-3
HART <sup>®</sup> Tag	1-2-3-1
HART Universal Revision	1-3-2-1
Input Characterization	1-2-6-4
Instrument Level	1-3-2-8
Instrument Mode	Hot Key
Instrument Serial Number	1-2-3-6
Instrument Status	7
Integral Control Enable	1-2-6-9-1
Integral Dead Zone	1-2-6-9-3
Integral Gain	1-2-6-9-2
LUI Language	1-2-3-8
LUI Pressure Units	1-2-4-5

Function/Variable	Fast-Key Sequence
Main Electronics Revision	1-3-2-5
Manual Calibrate Travel	1-4-3
Manual Setup	1-1-2
Maximum Supply Pressure	1-1-2-2-3 or 1-2-5-1
Message	1-2-3-2
Minimum Closing Time	1-2-6-8-2
Minimum Opening Time	1-2-6-8-1
Operational Status	7-3
Polling Address	1-2-3-7
Pressure	6
Pressure Calibration	1-4-4
Pressure Units	1-2-4-4
Protection	Hot Key
Restart	1-2-1-4
Restart Control Mode	1-2-1-3
Secondary Electronics Revision	1-3-2-6
Self Test Shutdown	1-2-8
Sensor Serial Number	1-3-2-7
Set Point Filter Time	1-2-6-6
Setup Wizard	1-1-1-1
Stroke Valve	1-5
Switch 1 Closed <sup>(1)</sup>	1-2-9-2
Switch 1 Trip Point <sup>(1)</sup>	1-2-9-1
Switch 2 Closed <sup>(1)</sup>	1-2-9-4
Switch 2 Trip Point <sup>(1)</sup>	1-2-9-3
Temperature	1-3-1-1
Temperature Units	1-2-4-6
Transmitter Action <sup>(1)</sup>	1-2-9-5
Transmitter Calibration <sup>(1)</sup>	1-4-6
Travel	3
Travel Accumulator Alert	1-2-7-3
Travel Alerts	1-2-7-1
Travel Cutoff High	1-2-6-7-3
Travel Cutoff Low	1-2-6-7-4
Travel Deviation Alert	1-2-7-2
Travel Limit High	1-2-6-7-1
Travel Limit Low	1-2-6-7-2
Travel Setpoint	4

Function/Variable	Fast-Key Sequence
Tuning	Hot Key
Tuning Set	1-1-2-3-1 or 1-1-1-4-1 or 1-2-6-1
Valve Serial Number	1-2-3-5
Valve Style	1-2-5-3
Zero Control Signal	1-2-5-4
1. Available only if the instrument has a transmitter and limit switches installed.	

**Diagnostic Messages** The DVC2000 is constantly diagnosing itself for abnormal conditions while powered up. The following messages will appear on the local user interface if a fault condition exists (identified on the default screen by the alert symbol ). **Switch 1 ??? / Switch 2 ???:** The alert symbol in conjunction with this text indicates that limit switch circuit 1 is not powered, or at least one switch is enabled. In order for either of the switches to work, switch circuit 1 must be powered. Switch 2 cannot work alone. To eliminate the alert symbol, you can either apply 5 to 30 VDC to switch circuit 1 or disable both switches. Once switch circuit 1 is powered properly, question marks (???) will indicate that the corresponding switch is disabled. **Device Locked by HART:** Another HART<sup>™</sup> host is communicating with the DVC2000. Typically this means the instrument is “out of service”. In fw3 or later, clear this message by holding down the left button while cycling power to the DVC2000. **Check Supply:** The valve is not able to reach its target position due to insufficient supply pressure. This error will most likely occur in conjunction with the Travel Deviation error. **Travel Deviation:** This error message indicates that there is a difference between the input signal (after characterization) and the actuator travel reading from the position feedback element. The default setting is 7% travel deviation for 5 seconds. These settings can be configured through a HART communicating host on any HC instrument or higher. Possible sources of this error are insufficient air supply or excessive valve friction. **Check I/P Converter:** A problem relating to the I/P converter has been detected. Sources of this error include: ●Electronics problems indicated by the drive current read back being out of range. ●Low supply pressure indicated by an active drive signal alert, and ●A stuck valve resulting in integrator wind-up. **Check Mounting:** The valve position feedback reading is valid, but it is outside the operating range. Sources of this error include loose or bent mounting brackets or a misaligned magnet array. This error does not identify faulty components, but rather faulty installation or alignment. This alert is also called a Travel Sensor Failure. **Shutdown Activated:** This screen appears if the positioner has shut down and no air is being delivered to the actuator. This indicates that the valve is at it's fail-safe position. An example of a source of this error is corrupt firmware code upon start-up. The factory setting default for this error is disabled. This alert will only be enabled by actively configuring it with a HART based host. **Replace Main Board:** A problem with the electronics has been detected. Sources of this error may include hardware or firmware problems. If this error is detected the instrument may be operational but performance will be degraded. **FIELDVUE Instruments:** Displayed when there are no languages loaded on the DVC2000. Could occur during firmware download. **Pressure = ???:** The actuator pressure reading is greater than 125% of the configure maximum supply pressure. Reduce the supply pressure or stroke that valve closed (air-to-open/fail close setup), eventually there will be a point where numerical values appear.